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# Apple FACTS and Experience

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**SEVEN YEARS AFTER** the descriptions herein of Delicious, Black Ben Davis and Champion were written, and—we could change them only to make them stronger. Delicious is recognized to-day as being of **finer quality than any other apple known**. The old tree is now 21 years old, has stood 40° below zero without injury, and has borne **15 successive crops without a failure**.

**Champion** has proven a market apple that excels even Mo. Pippin as a **quick payer**, unequalled as a **drouth-resister**, and superior to Northern Spy as an absolutely **woolly aphid-resistant tree**.

**Black Ben Davis** is taking its just place, even more rapidly than we had anticipated (for introducing new apples is a slow process), as the **hardiest and best** of the entire Ben Davis family. In time, no one will plant Ben Davis or Gano who knows and can get genuine Black Ben Davis, and it will become the **great American export apple**.

**First Ever Sold** . . . **Crockett Brown**, Merchant, to **Prof. Van Deman**, Oct. 3, '02: In 1874, '75 and '76 I hauled apples off the original Black Ben D. tree to Western Kan., Gt. Bend, Oxford, Wellington, Wichita, etc. Tree was 7 or 8 yrs. old in 1874; extremely full bearer, 6 to 8 bushels a year. Apples always large and fine, dark red, juicy and good; used to save them to top off my loads. Sold at \$2.50 to \$3 a bushel. Best market apple we have to-day.

**NO DOUBT . . . of Distinctness**.—When in Ark. this fall I found the place where the original **Black B. D.** tree grew. . . Now, I have no doubt of the true origin of **B. B. D.** nor its distinctness from Gano.—**Prof. Van Deman**.

**20 x 20 FEET**.—**Prof. Van Deman** to **D. L. Wentz**, Benton Co., Ark., Oct. 3, '02: You cannot do better than to plant all Black Ben Davis and Jonathan. . . Set 20 x 20 feet and cut out **when they need it**.—**Prof. Van Deman**.

**He made Ark. Apples Famous**.—W. G. Vincenheller, **Ark. Exp. St'n**, 1900: Had supposed Black Ben D. was only Gano—until investigated. . . Another point: Black B. D. is less subject to bitter rot than most other sorts.

**Later**, 1901: Black B. D. is in high favor; several growers here, since seeing it fruiting, will plant it entirely for the Ben D. type. . . Book us for 10,000 one-year trees. . . We shall have a model orchard of finest varieties. Shall plant entire orchard B. B. D., 40 feet each way, and fill in both ways with Champion, Jonathan, G. Golden—making trees 20x20, then cut out.

**All Like to Reap Without Sowing**.—**Mr. and Mrs. J. F. Bain, Lincoln, Ark.**, to **Prof. Van Deman**, Oct. 2, '02: In 1893 and '95 Black B. D. were largest and finest apples ever saw, far larger than any Ben Davis beside them; many were too big for the apple-peeler. Dried fruit is heavier. Bears more regularly; bore good crops when B. D. failed. Better flavor, stands cuffing about and keeps better. . . Had begged nurserymen to graft it, before Mr. Stark saw it in 1895. After he saw its worth and bought the stock, then all wanted it. Do all we can to protect Stark Bro's . . . but for Mr. Stark, Black Ben Davis probably would never have been sent out.

**JOHN WRAGG**, late Vice-Pres't Iowa State Hort. Society, said: "The man who notes the value of a new fruit, introduces and spreads it abroad, is even a greater benefactor than the originator—who does scarcely anything if he lets it live out its life and die unknown. But he who sees its value and distributes it widely, does very much more than making two blades of grass grow where one grew before."

**Kieffer APPLE**.—What Kieffer is among pears, Black Ben Davis is among apples. And, as Prof. Meehan has pointed out, had not an alert nurseryman seen the Kieffer and forecasted its value, it, too, would have kept the noiseless tenor of its way, unknown, unhonored and unsung.

**Slow, Expensive, Hard** work is required in introducing new apples—no matter how superlative, how much better they are than old kinds. Many take it for granted that a variety cannot amount to much unless they find it mentioned in every catalog or voted upon by every Hort'l Society. Jefferis originated more than 50 years ago, yet it is found in few nurseries. York Imperial was brought to public notice nearly 50 years ago, but to-day is little known in many sections.

**PROF. THOS. MEEHAN** wrote: "When a fruit becomes widely scattered, it achieves popular favor, simply **because people know no better**. It was the fashion to take votes at Pomological meetings as to best varieties, and hundreds voted on the best they knew. **No new and superior variety** could get votes in this way. It takes time for superior varieties to become well known."

**Force of Habit** is strong in the nurseryman, as in other people. Besides, there's less risk—and **cost**—in raising strong growing, well known, sure-to-be-called-for sorts. For people **WILL** plant what everybody plants, never stopping to learn **WHY**.

**This Thing Was NOT Done In a Corner.**—There exist persons so unfortunately constituted as to be incapable of comprehending that others besides themselves are working earnestly and with what skill they have and in their own way, to do good in the world. These over-suspicious souls easily arrogate to themselves a monopoly of good intentions, even while they lightly question the integrity of purpose and the motives of others,—apparently careless, or ignorant, of the inevitable recoil. Since 1895 we have sent Black Ben Davis and other new apples around the world—to India, China, Korea, Japan, Australia, New Zealand:

**AUCKLAND, NEW ZEALAND**, 2d Mar., 1901: You will be glad to hear your Apple of Commerce will not take the Aphis. There is NOT A SHADOW OF DOUBT about this. Both root and branch are ABSOLUTELY RESISTANT AGAINST WOOLLY APHIS. Here, we call it "American blight." We could not sell an apple tree if not worked on Aphis resistant stock. We have very much pleasure in giving you all information possible, as it should be of vital importance to you to work up a stock of trees that are required where Woolly Aphis is bad. Black Ben Davis is a **grand apple**.

**Later**, 19th Sept., 1902: Apple of Commerce is giving the **greatest satisfaction** to all growers. The tree is absolutely aphis resistant. Champion also HAS NOT TAKEN THE APHIS.—**D. Hay & Son.**

**Men Who DO Things** were ever decried by envious souls. "And now at this day comes" a Rip Van Winkle nursery firm who have evidently decided, Canute-like, to stay the resistless Black Ben Davis tide. Many letters of this "enquiring turn" have been sent us by recipients:

**Better Late Than NEVER.**—\_\_\_\_\_, Nov. 22, 1902: We wish to learn regarding origin, etc., [of Black B. D.]; will appreciate any information: When did it originate? Who was owner of place on which it originated? Who was first owner? Where did he come from? Who were next owners in their order? Who owned and occupied place when original tree came into bearing? Who was owner of place when apple first attracted attention? Who first called attention to the merits of the apple? What name was it first known by? Is it called by any other name? When did local nurserymen begin propagating it? Any additional information you can give will be appreciated. Thanking you in advance, —

**CAUGHT TARTAR.**—**L. M. Winans** to — — —, Oct. 26, '02: "Relying to yours: Varieties sent you were Stark Trees, Champion and Bk. B. Davis. This I have to say: Champion is my choice of all apples for this section. Have 1000 Gano, bought from local nurseries; have 1000 Bk. B. Davis, bought from Stark's. They are set on adjoining 40's; as far as you can see fruit and trees plainly you can see a decided difference. I'm so much better pleased with Bk. B. D., have bought 1000 more of Stark's Bk. B. Davis.

"Now, Stark Bro's have no mortgages on me. I'm not agent for them nor any one else, neither have I ever rec'd one cent from them in any way, not even a cigar; but will say they have done an immense amount of good to the fruit industry in pushing and causing the setting largely of such fine apples, so well adapted for this S W., as Champion and Bk. B. Davis."

**The "Red Hot" Firm.**—Had two letters from — — — nursery; enclose copy of answer to last one—which almost begged for a "cull" that I'd told them was all I had left . . . —**Frank Femmons**, Home Orchard, Madera Co., Calif.

**His Suspicion WAS Well Founded.**—"Yours 22d with request for Black Ben Davis apples came to day . . . For 60 years I've known of the confusion often growing out of local names for fruits and had supposed this **B. B. D.** vs. Gano was of that character; but I begin to think there is something else in it. Many years ago, when living in Mo., I knew of Wm. Stark as one of the foremost horticulturists of the west,—when I wanted trees I naturally turned to the old nursery. . . . No one could ask for better or more honorable treatment than Stark Bro's have always given me. . . .

"You are there in the native home of the two apples, and many others of great value, and have more advantages in learning the true history than I can have at this distance.—So you will pardon me if I simply refuse to be drawn into any controversy. Sincerely, **Frank Femmons**, Mar. 28, 1902."

**Great Sport.**—From **H. A. Masters**, Appanoose Co., Iowa, Oct. 27, 1902: Delicious apple is good. . . . Pleased to note Prof. Van Deman's articles on Black B. D. . . . Rival nursery agents here have been making great sport over your Gano-B. B. D. Am interested in having it sifted out.

**King of the Orchard.**—**Wesley Page**, Supt. **Koonce Orchards**, Arapahoe Co. Colo., Nov., 1900: The 1-year old Black Ben Davis sent Mr. C. B. Kountze Spring, 1897, have fully caught up with 2-yr. trees, planted same time. Those B. B. D. bore last summer, colored perfectly, handsomest apple I ever saw. Certainly a very young bearer, and the fruit cannot be excelled.

**Later**, July, 1901: Have been busy picking Mont. O. cherries; a fine crop for 4-yr. trees. Many have 6 gallons to the tree—very large and even. Florence is the only crab for me; they are full—limbs touch the ground. Black B. D. are fine; an easy leader of all winter apples. Our Ben Davis are small compared with Black Ben D.—the King of the Orchard.

**Later**, Oct., 1901: If the Black B. D. and Champion were gold dollars Mr. Kountze wouldn't think more of them. People came from far and near to see the orchard, and everyone thinks it can't be beat. Mr. Spaulding of Fort Collins says he has traveled all over the U. S. and never saw as fine an orchard. He thinks B. B. D., Champion and Delicious can't be equaled; says if Delicious is a good keeper, no apple grown will outsell it. B. B. D. is so far ahead of Ben Davis it should not bear the name; side by side they compare like silk and cotton—and B. B. D. is the silk. Champion are very fine—uniform color, size, and not small either.—**Wesley Page**.

## TRADE-MARK Fruits.—Pres. J. C. Ferris, Iowa Hort. Soc., says:

"It is not the purpose to complain because the originator or introducer of new varieties controls valuable specialties. To abridge this privilege would be to discourage production. The producer is justified just as an inventor is justified in protecting a valuable invention, or an author in reserving copyright."

**Injustice to New Fruits.**—Originators of new fruits must spend many years of patient toil and investigation. And the desirability of new and improved fruits is conceded on all sides. Yet originators are not encouraged . . . and finding originating unprofitable, such men as Jacob Moore, and others, are abandoning their life work.—*Fruit Grower.*

**No Nurseryman** without protection can afford to pay an originator—for he has no protection himself, nor is he able to **protect the public.** For the pirates have no interest—nor conscience—in keeping a variety pure and unmixed. A Trade-Mark Fruit, like trade-mark merchandise of any other kind, means a guaranty, a protection, to buyers.

**MAJOR HOLSINGER**, in *Western Fruit Grower*, March, 1900.—"Is or is not Gano identical with Black B. D.?" I pronounce them the same. . . The best new variety introduced in the last quarter century. I claim for it a place in the first three winter apples—Ben Davis, York Imp'l, Gano.

**Later**, Dec. 30, 1901: I promised yesterday to do you justice in the matter of Black B. Davis vs. Gano. At first I thought them identical. In a later examination . . . called to our assistance several of our very best horticulturists. . . I feel positive now that they are different.—**Frank Holsinger.**

**Later, in Wes. Ft. Grower**, Jan., '02; . . . Black B. D. is a distinct variety from Gano. "Crow" is not a pleasant dish, yet I take it with good grace. I promised, when the test was undertaken, that I would have the fairness and honesty to give the public my conclusions. While I wish this dish had been spared me, I accept it with all condiments.—**Maj. Holsinger.**

**Later, in Wes. Ft. Grower**, May, 1902: We did not expect when we gave our opinion of the two apples exhibited in Topeka to stir up the animals . . . All we claimed was that two plates shown, one labeled "Black Ben Davis," one "Gano," were not the same variety, noting differences.

I confess I did it very much against my own prejudices, as I have during all the past persisted in saying they were one and the same. I confess, like others, I did it superficially. I had not even taken the precaution to investigate the matter carefully. . . I tried to have Messrs. Goodman and Gano with us in the final test. They failed to tarry with us, or I feel assured they, too, would have been convinced as were Mr. Walter Wellhouse and the other horticultural gentlemen who did join us in our examination.

In the discussion on this question, I am found fault with principally by the nurseryman, while I am sustained in my decision by the fruit grower. Now why this? Is it a fact that competition is allowed to thus bias the nurseryman in his contention? . . . I've had my say. Mr. Goodman has been equally positive on the other side; he sets considerable stress on Prof. Stinson's opinion. Who is Prof. Stinson, that he should pose as an expert on nomenclature? . . . In his report Prof. Stinson says: "Black B. D., Etris, and Ark. Belle are from Washington Co., Ark. If you want trees you will be satisfied by buying Gano. They are practically the same."

I was even more pronounced. I said, "they are the same." By all means give us a committee; but let it be one qualified to speak as an oracle. It will require time to fully determine this question of difference. . . . But then who shall report? My 67 years may require another to do so. This, I doubt not, will be done by one of my three sons, possibly by all; as each is intensely alive to the subject. Of one thing I am convinced: That should they be pronounced the same, or "practically" the same, blessed is the man who shall have planted them and thrice blessed he who shall have influenced others to plant them.—**Maj. Frank Holsinger**, in *Wes. Fruit Gr.*

Twigs with leaves attached and cut from 2-yr. trees, of 4 sorts, each twig growing with exactly the same exposure, etc., were sent Prof. Beale for microscopic examination. The 4 twigs, Ben Davis, Black Ben Davis, Gano, Givens (apparently a Ben Davis sdg.), were marked respectively B 1, B 2, B 3, B 4. Prof. Beale did not then, nor does he to this day, know the identity of any one of the 4 sorts.

**Firmest, hardest, stiffest leaf . . . drouth-resisting, fungus-resisting.**—From **Prof. W. J. Beale**, Mich. Exp. St'n, Agric'l College P. O., Mich., Oct. 8, 1902: In answering questions concerning the 4 apple twigs, one should be very cautious. To determine the relative structure microscopically is not so easy as might at first be supposed.

In feeling of the fresh leaves and bending them between the thumb and finger, B 2 [Black B. D.] appears firmer, stiffer, than either of the others. B 1 [Ben Davis] and B 3 [Gano], thinnest; B 4 [Givens] next thinnest. In other words B 2 [Black B. D.] has stiffest, hardest thickest leaves, the other three not differing much. B 2 leaves remind one of the leaves of the Kieffer pear; they should beat the others for drouth-resisting, fungus-resisting.

I made 4 examinations of each leaf. . . In looking down at the upper epidermis magnified, the cells are smallest in B 2 [Black B. D.], the walls thicker, the palisade cells seem smaller.—**W. J. Beale.**

**Messrs. Chapman** of Boulder Co., Chapin of Delta Co., and Spaulding of Larimer Co., Colo., here this week; all went to see the Black B. D. . . Black Ben Davis is THE apple for Colo.—**Thos. W. Page**, Littleton, Colo.

"Dear Mr. Femmons: I am much interested in yours Oct. 8, and shall be glad to undertake the examination and to write you results thereof in detail. You will be free to use whatever I send you."—**Prof. E. J. Wickson.**

**GRATITUDE of the World for Black Ben D.**—From **Frank Femmons, Home Orchard**, Madera Co., Calif., Oct. 30, 1899: Wish you could see my apples! . . . Lawver poor—as you've always said, . . . York Imp'l a grand apple. Jefferis fine. **Black Ben Davis** I'm proud of—it is simply grand.

**Later**, Mar. 16, '00: Delicious 2-yr. grafts bore; certainly high quality. Grimes Golden good a short while, but soon loses quality. . . . Gano is a Ben Davis in tree, fruit redder; gets mealy by mid-winter. **Black B. D.** still holds its own; sound yet. Sent specimens to many parts of the state; everybody praises it highly. A grand apple and you deserve the gratitude of the world for its introduction.—**Frank Femmons**.

**Later**, Nov. 1, 1900: I think more highly of the new sorts than ever. **Black Ben Davis**, my 1st choice last year, is the most valuable apple grown. Champion my 2d choice—even size, good shape, bright color, good flavor, keeps well, hangs well. Delicious—well, that name tells the whole story.

**Later**, Oct. 17, 1901: Am so highly pleased with **Black B. D.** in every way that am top grafting it on Shackleford, Nero and Lawver. Top grafts set Feb., 1900, are bearing full. . . . Delicious bore a good crop; is in its prime at Christmas. All pronounce it the finest apple they ever tasted.

**Later**, Nov. 7, 1901: Sorry could send but few Delicious—the rest were eaten. You're right in thinking it ideal quality. Wish you could see **Black B. D.**, 2-yr. top grafts—loaded. You make no mistake in pushing it.

**Later**, Feb. 1, 1902: I've fruited Gano 5 years, **Black B. D.** 3 years, and how the two can be confounded is more than I can understand. Glad Maj. Holsinger found a difference. I have the two growing under identical conditions, in the same orchard. I find **Black B. D.** and Gano different in growth, foliage, color-shade of bloom, setting of fruit, size, color at maturity and most of all in keeping quality. . . . The wood growth is stronger and more thrifty in **Black B. D.**; foliage is larger, a brighter green; bloom has more red; fruit is not so inclined to set in clusters at end of twig. **Black B. D.** is more spreading in growth as it gets age; fruit fully a third larger and a more glossy red; flesh more solid and juicy and retains its character to the last, while Gano becomes spongy and tasteless.

Both beautiful apples, but Gano here does not equal old Ben Davis, except in color. Have 7 different apples of Ben Davis family; all are good, but **B. B. D.** is so far ahead of all the rest, that did I not know the possibility of improvement, I would call it the masterpiece of nature's bounty.

Fast growing interest in **B. B. D.** will soon make it The Great American Apple. Have more faith in it than in any other I've ever seen. When it can be put into the markets by the car- or train-load, it's going to create a big excitement. Healthy, fine grower; a wonderfully beautiful apple, quality that will satisfy anyone—I predict for it a wonderful future.

**Later**, Sept. 16, '02: Fruit here is fully a month late. **Black B. D.** just beginning to color; Gano shows none yet. Gano very full last year, but few this. **B. B. D.** trees are too full. It acts like an every year business apple.

**Later**, Sept. 24, '02. Your suggestion that committee come here at your expense, to examine and report upon **Black B. D.** and Gano growing in Home Orchard would meet my hearty approval, if conditions were as favorable as last year. Season here has been peculiar; all fruits fully a month late. My Gano tree (I grafted over the others 2 years ago; one was all I wanted) has but few apples this year. **Black B. D.** are all full, making a good show, but will not be so fine and large as last year. . . . I will send some typical specimens with wood and foliage of both, with statement of my experience and observation, to Prof. E. J. Wickson, of Cal. State University, whom I know as one of the best authorities on fruits of all kinds.

**Later**, Oct. 16, '02: Yours rec'd enclosing letter from Parker Earle, also notes of C. M. S., on history of **B. B. D.** I sincerely thank you. Am glad **Black B. D.** is marching on so proudly. From the first specimens grown here 4 years ago I've always felt sure it was an apple that by its own merits was able to conquer in any field, and the more I see of it, the more I am convinced of its high market value. In my judgment, it will stand alone at the head for many years to come. . . . And then I'm glad of your success in making such an apple known to the orchard planters of the whole country—a proud honor and you deserve the reward.

Have sent specimens of **Black B. D.**, Delicious, Champion, to Parker Earle. Stayman Winesap are this year bearing their first, but they don't show up highly; may do better another year. . . . Wrote Prof. Wickson as to **B. B. D.** vs. Gano, asking him to make examination and report.

Yosemite trade demands the best, and I'm proud to say every box of fruit has given satisfaction—it was mostly grown on Stark Trees.

**Later**, Oct. 27, '02: Nov. Western Fruit Grower rec'd. . . . Went out to-day and had a good long visit of admiration to my **oldest Black Ben Davis tree**. Loaded with beauties—glowing rubies in a crown of living green; and their bright red faces shone in the sunshine as if conscious of their triumph and vindication. I felt it indeed rightly crowned "King of the Orchard." Can only repeat what I said long ago: You deserve the gratitude of the world for its introduction.—**Frank Femmons**.

**Firmly Fixed. . . A Grand Success.**—**Later**, Feb. 7, '03.—Have watched new apples, you've so kindly sent me from time to time, and gladly give you benefit of the experiment. The GRAND SUCCESS of Black B. Davis so greatly overshadowed all others, that some haven't rec'd merited attention.

Delicious is an apple of the very highest quality. Champion, Springdale, Ben Davis sell well, but we want fruit of higher character.

Spring '98 you sent me Black B. D. and Ingram. **B. B. D.** fruited 4 years, Ingram made 5 years' good growth; has never shown a bloom. Summer King is fine. Stribling, worthless. . . . New Zealand apples, Washington and Mayflower, fruited 2 years; worthless. . . . Sharp Late Red, irregular size and form; good, but were gone by Christmas. If New Zealand has nothing better, our Pacific coast will have a good market over there. Stayman Winesap small and not highly colored, did not keep well; flavor and texture very fine. Mam. B. Twig at first disappointed, but is proving fine. . . . An orchard in this mountain fruit belt, with the experience I have now, would contain Delicious, Black B. D., M. B. Twig, Champion, perhaps Springdale; the list needs others, but I havn't found them yet. **Black B. D.** is so firmly fixed in this country that, like our mountains, it will stand.—**Frank Femmons**

**DELICIOUS in HAWAII.**—Later, Feb. 19, 1903: Altitude of orchard, 3000 ft., on side of mountain, or low ridge. . . Was laughed at when I began to clear and plant. No one thought an orchard possible on such a dry ridge. . . Intended to re-graft the last of my Gano trees this spring. . .

My re-grafting has been to Black Ben Davis, some Champion, but this spring am going to graft **Delicious**. It's an apple everybody wants. One lady said, "Why, what a delicious apple! What is its name?" Urged a gentleman who "**didn't dare eat apples**" just to try one,—"That's fine; can eat that apple," and his eye showed his pleasure. Everyone delighted with it. Some went to Honolulu,—"Could you send us more."—**Frank Femmons.**

**Worth MILLIONS.**—Later, Feb. 24, '02: As to caution: Refer to introduction of Wash. Navel orange into Cal. When first fruited at Riverside all orange growers of So. Cal. went wild over it. Orchards were planted everywhere fast as trees could be grown, and that "boom" was worth millions of dollars to the state. Perhaps another illustration is the introduction of Elberta peach in the east—we all know the history and results. Fact is, the production and commercial activity of recent years, particularly in fruit lines, allows no time to be cautious too long. While prudent to use best judgment, a growing demand must be quickly supplied.

**Find** herewith, report Prof. Wickson sent me. There is no higher authority, or one more highly honored by western fruit growers.—**F. Femmons.**

**Distinct and Different. . . clearly better.**—From **Prof. E. J. Wickson**, author of the great pomological work, **California Fruits**, etc., to Frank Femmons.—University of Cal. College of Agri., Berkeley, Nov. 3, '02: Specimens arrived in good condition and I have given much time to their careful examination. General aspect, both of the fruit and of branch, gives the clear impression that the varieties are different; examination of all features usually employed in pomological differentiation shows resemblances, and the difficulty of pointing out by descriptive words the distinctions which the general aspect declares to be present, is great. I have, however, prepared such descriptions as follows:

### Gano

Two-yr.-old wood	-brownish red, nearly free from down; dots few, light yellow, variable in size.
One-yr.-old wood	-reddish purple; downy; dots very few, whitish.
Leaves	-sharply serrate; medium size; reverse nearly free from down, petiole and mid-rib partly tinged with red; many leaves yellowing at this date.
Fruit	-medium to large; round ovate, inclined to oblong in some specimens; light yellow partly and very unequally covered with bright red with few stripes and blotches of dark red; faint lilac bloom; dots numerous, variable in size, russetty aspect on yellow skin, faintly yellow on red regions; stalk about $\frac{3}{4}$ inch usually slender, cavity deep, even or three furrowed in some cases, acute, russeted; basin wide, abrupt, channeled; calyx large open, petals quite uniformly reflexed; flesh white with faint yellowish tinge; flavor sub-acid, pleasant, not marked.

Following notes may more clearly define the position I am compelled to take that the two apples are separate and distinct:

In the 2-yr.-old wood the brownish tint and smooth bark of Gano contrasts strongly with the darker tint and partially retained down of Black B. D. The current year's growth is quite similar, but the heavier down on the reverse of Black B. D. leaves separates them again. Gano shows a marked maturing of some leaves, while foliage of Black B. D. is still fully green. Fruit of Gano is also riper, as shown by texture and flavor.

Prevailing form of the fruit is note-worthy. The 3 Gano show wide variability—from roundish ovate to oblong, while the 5 Black B. D. are almost identical in form—a very handsome and uniform round ovate. Coloring is also very variable in Gano; one specimen would almost pass for a yellow apple, due largely to leaf-shade no doubt; another has but faint reddish blushes, and the third showing evident signs of ample sun exposure, has its red color easily distinguishable as stripes and blotches; scarcely any diffused color, even on sunniest side. Black B. D. specimens are uniformly colored; dark red running to deep purplish red; almost black in the full sun; diffused colors thruout and scarcely an intimation of either stripes or blotches. There seems to be a different under-color in the two kinds. Gano seems to have a prevailing yellow with green suggestions, while Black B. D. takes its red on a green basis more directly. Stalks also different; slender in Gano, uniformly stout in Black B. D. Gano cavity rougher, more irregular.

In flavor there is marked difference; Gano being flatter and less marked than old Ben Davis, while Black B. D. is clearly better. This was evident altho Gano had apparently the advantage of greater maturity.

I conclude then from specimens of these two fruits grown side by side in the mountain district of Cal., which is exceptionally well suited to develop the best there is in apple varieties, that Gano and Black Ben Davis are distinct and different; that the former by its irregularity of form and color coupled with low quality is of doubtful commercial value, while Black B. D., by uniformity of shape, rich, solid color and superior flavor, promises to be a profitable market fruit.—**E. J. Wickson**, Hort' st, Calif. Exp. St'n.

### Black Ben Davis

Two-yr.-old wood	brownish purple, quite downy, dots few, more uniformly large.
One-yr.-old wood	reddish purple; dots few, whitish, large.
Leaves	sharply serrate; medium to large; reverse quite downy; petiole and mid-rib partly tinged with red; all leaves in good color.
Fruit	large; uniformly round ovate; greenish yellow, quite uniformly covered with deep red and purplish red, very dark purple-red in the sun, very faint indication of stripes or blotches, color very solid and uniform; dense lilac bloom; dots light and rather conspicuous because of dark background; stalk $\frac{3}{4}$ inch quite thick; cavity deep, even russeted on light green; basin wide, deep, obscurely channeled; calyx large, partly closed, petals irregularly disposed, flesh white with slight yellow tinge; flavor pronounced sub-acid, inclined to aromatic; superior to B. Davis

**E. P. POWELL**, Hort. Ed., in **N. Y. Tribune Farmer**, Nov. 27, 1902: Champion, Black Ben Davis, Delicious—I find it difficult to say which is the most beautiful. I've never seen anything handsomer. B. B. D. in appearance is a much enlarged Jonathan. Very nearly a solid dark crimson, with a flushing of gold at spots. Has a beautifully opened calyx end. Champion is more flattened, with an undertone of yellow, richly covered with crimson and very deep dark stripes. Delicious is more or less covered with crimson. . . . Found it difficult to cut these apples, it seemed to be the destruction of so much of the beautiful. Delicious . . . the more I ate the more I wished to eat. The aroma is something peculiar, and the texture is almost as melting as a pear. It is highly digestible, and the name Delicious fairly belongs to the apple. Core is very small,—the smallest I ever saw in so large an apple. Champion and Black B. D. much better than expected—would fairly rank among good dessert apples. If they do as well east as west, we have here three finest acquisitions I am acquainted with for the orchard. I've already planted them . . . would not hesitate to plant them largely. I have in my orchard no new apples that rival these in beauty or in market qualities, except McIntosh Red, Sutton Beauty, York Imperial. . . . Black B. D. is no more like a Ben Davis than it is like a pumpkin. Its glorious beauty is matched only by a very select Jonathan—which is but half the size. In quality there is no more likeness. Why not call it Black Ben? I should consider an orchard of B. B. D. as good as a gold mine.—**E. P. Powell**, Oneida Co., N. Y.

**Apple Kings.—Later**, Nov. 13, '02: You see what I think of Stark apples . . . They are the Apple Kings, the noblest products of the orchard. You are doing us a big favor to introduce such magnificent fruit.

**Most Extraordinary.—Later**, in **N. E. Homestead**, Jan. 3, 1903: Let me call attention to new sorts. Two years ago was favored with box of small or medium apples—golden color . . . juicy, richly flavored . . . Stuart's Golden. [We grew S. Golden 20 years ago, but 18-yr. orchard trees here have never yielded well—not even a peck of fruit.—**STARK BRO'S.**]

Another apple of most extraordinary quality . . . is rightly called Delicious. Size ranks about with Ben Davis, a rich yellow overlaid with crimson; flesh golden . . . Black B. D. and Champion are magnificent looking apples—deepest gold, overlaid crimson. In quality they simply rank as really good—not quite best. . . . For market none of our newer sorts will surpass these two, as their keeping qualities are equal to their beauty. York Imp'l is doing admirably with me, only that it is peculiarly subject to scab. This and Mother, total failures this year.—**E. P. Powell**.

**Absolutely no doubt** that Black Ben Davis is entirely distinct from Gano.—**M. J. Wragg, Pres. Iowa Hort. Society**, Dec. 12, 1901.

**Some Authorities Often Say. . . "I Don't Know."**—From the **Rural New Yorker**, N. Y., Mar. 22, '02: Thank you for apples. . . . There is, as you know, embarrassment in drawing instant conclusions between different apples. . . . Mr. Collingwood has had in mind to order trees of your **Black B. D.** and cultivate in same field with Gano. Meanwhile, getting all information possible. . . . The R. N.-Y. has no axe to grind in these matters, has no preference and no prejudices, and is too liberal to allow any prejudice to influence or restrict its usefulness.

If Prof. Van Deman or anyone else has made an error (which all are very liable to do) in his judgment on this apple or on anything else, it is of more importance to the R. N.-Y. to have that error corrected than it can possibly be to you or to anyone else. We believe you will appreciate this. . . . It is hard to follow up all the new things demanding attention and speak authoritatively and definitely on each one; in fact, as a rule, we find that those who do, make the greatest errors. The best authority the writer has ever personally known, was one who most often used the frank expression, "I don't know." When more of our self-constituted authorities learn this little sentence and acquire courage to say it, there will be less controversy over matters of this kind. Finally, we wish to thank you for your courtesy and to assure you it will be our great pleasure to give **Black Ben Davis** credit for whatever merit it seems to deserve.—**The R. N.-Y., John J. Dillon.**

**PROF. VAN DEMAN, MAJ. HOLINGER, COL. VINCENHELLER and many other pomologists, supposed the two identical until they INVESTIGATED.**—There is a contention by those pushing Black Ben Davis that it is distinct from Gano, and some . . . who have not seen trees in bearing but only the fruit, as with myself, consider they are one and the same variety.—**H. E. Van Deman**, in **Rural New-Yorker**, Feb. 1, 1902.

**Black B. D. at Home.—Prof. Van Deman, in Rural New-Yorker**, Oct. 25, '02:—. . . My own former opinion was not positive as to whether B. B. D. was distinct from Gano, until after a trip made this fall to Washington Co., Ark. It was my purpose to visit the home of B. B. D., if such a place could be found; for this has long been a doubtful question in the minds of many others, as well as in my own. As repeatedly said in the R. N.-Y., the truth is what we need to know, no matter whom it helps or hurts in this controversy. . . . Oct. 2 and 3 I spent looking up the facts from those who now live where the apple was said to have originated. They are honest-minded country people, if I am any judge of human nature. I was shown by two old people who live there, the spot where the old seedling tree stood at the rear of their log cabin. It died in 1889, principally from the shock of cutting off a part of the tree that hung over the shed kitchen door. I learned from neighbors who had long lived there, that they were well acquainted with the old tree and its fruit; that it came up from seed soon after the cabin was built and a little clearing made in the woods. It was not in an orchard row, nor was it moved from where it came up. Apples were taken off it and hauled by wagon to Kan. by one man I talked with, who said he liked them to top off his loads, because of their size, beauty and good quality. . . . Fortunately, G. L. Guthrie cut scions from the old tree in 1882 and grafted them. Ten of these were planted, when 1-yr. old, in his orchard; one died and I saw the other 9 in bearing, loaded with big red apples. . . . I visited one of the best fruit growers in the county, who had long known Black B. D., and the fact that he had an orchard of 58 acres of it, and a determination to plant 75 acres more is sufficient evidence of his faith. Many others have planted, after seeing the bearing trees. . . . Black B. D. is solid red, with no semblance of stripes . . . while Gano is lighter in color and often indistinctly striped.

**58-ACRE B. B. D. Orchard Speaks for Itself.—Prof. Van Deman, in Western Fruit Grower, Oct., '02:** As I've said before about B. B. D.-Gano contention, the truth is what we should know. Therefore, I made a long-contemplated trip to Ark. to see for myself the trees in bearing, if there were any to be found,—in connection with another matter which took me to that state. I had long been uncertain as to the true identity of the apple which has been pushed by Stark Bro's, and had promised myself and them to sometime critically investigate the matter. . . I first went where the original tree was said to have stood. . . The spot was shown me at the rear of a log cabin by the two old people, Mr. and Mrs. Nathan Thomas, who live there. They told me the tree died in 1889, because chickens had roosted on it so much for several years and the largest branch had been cut off. Tree had also borne very heavily from time it was first known by them. Both spoke of the apples in very approving terms as better tasted than Ben Davis and keeping later. . . Next visited Stephen Thomas, who lives on adjoining farm. . . He and his wife and two sons all told of chickens injuring the tree by roosting in it so much, and of the cutting off of the big branch causing its death. They said it bore regularly, and fruit kept later in spring than Ben Davis. G. W. Collins was then called upon. He had lived in that neighborhood from before the time the B. B. D. apple tree came into existence and knew it well from the time it began to bear enough to attract attention. He said "Parson John Black" once wanted a cabin built in the woods where Thomas now lives and that he "carried up one of the corners." . . Rev. Black's name is perpetuated in present name of the apple. It was while a Mr. Reagan was living there that the tree about which so much stir is now made attracted attention, because of the fruit it bore. It was so red and kept so well. Was also of good size and a good apple to eat, altho there were many other good seedlings all over that region and plenty of grafted kinds. Mr. Collins said that in 1882 G. L. Guthrie took a few "cuttings" from the tree and made root grafts, which he set in his garden in a little row. When one year old set them in orchard. . . That Guthrie's wife gave one tree to her mother, Mrs. Beatty, but that it died in 1901, after it bore a lot of fruit.

Next went to the Beatty farm where a son of the woman who planted one of the second generation trees, now lives. He told me . . . that the tree bore the best apples in his orchard, until he built a rail pen around it to fatten hogs in, which killed it in 1901. Upon being asked why he did such a foolish thing, he said it was thrifty and made good shade for the hogs!

The old Guthrie farm, now owned by John F. Bain near Lincoln, Ark., was next visited. Here I saw the 9 Black B. D. trees that were grafted and planted by Guthrie. It was easy enough to see them before the place was fairly reached. The apples glistened thru the falling rain. The trees were well loaded, altho Mr. Bain said many bushels of samples had been gathered. There were plenty of Ben Davis of same age in the orchard, but their fruit was dull in color beside the Black B. D. apples. Their foliage was almost all off the trees, while that of the entire 9 Black B. D. trees was nearly all on and green. I gathered fruit of both kinds with my own hands. . .

The second day rain continued, but I was determined to see Gano on the trees and secure some for comparison, from the same vicinity as the Black B. D. and Ben Davis apples I had already gathered. A 6-mile ride brought me to an orchard where Gano trees were bearing abundantly and I gathered what I wanted. Then went to the farm of one of the best orchardists in Ark. (Sam'l T. Cole, Clyde, Ark.) who has 58 acres of Black B. D. trees, 4 years old. . . Mr. Cole said he had known the variety for many years and Gano as well, that they were not the same; that as evidence of his opinion **the 58 acres of B. B. D. spoke for itself.** He also said he would plant 75 acres more as soon as he could get the trees. [We have since sold Mr. Cole 2200 B. B. D. trees.—STARK BRO'S.]—**W. Fruit Grower, Oct., 1902.**

**NINE POMOLOGISTS Unanimous.**—Washington, D. C., Nov. 13, 1902.—Some are writing to me about **Black B. D.**-Gano and I always respond, saying just what I saw, and am in no manner fearful of saying anything that will or can be refuted. The truth is all that I stand for, and for that I will stand forever. ————— wrote me to send them a part of one of the **B. B. D.** I got in Ark.; I did so. Also a Gano that I got there. The apples will talk for themselves. This firm is "red hot," but I will go ahead and fear nothing. They can't get me to tell anything but the truth and that will hurt no one who does not need to be hurt. Two days ago I cut some of the **B. B. D.**, Gano and Ben Davis I got in Ark. and some other apples of the Ben Davis type, and in the presence of 8 other pomologists at the Dept. of Agr., we gave them all a critical test. They were different, for the most part, especially the **B. B. D.** and Gano. We were unanimous. . . Mr. —————, too, will surely have to see and acknowledge the facts some time, as to **B. B. D.** I did when I saw them.

Your new apple [**KING DAVID**—awarded 1st Prize by Ill. State Hort. Soc., Dec., 1902] will make its mark in due time. . . Its quality is as good as Grimes, which means **THE VERY BEST**, I gave a specimen to be modeled and painted at the Dept. of Agr. They were all delighted with it there.

Your **Delicious** was also tested and pronounced **EXCELLENT**. They are modeling one of those, too. We want some from Iowa. I will then make drawing, and publish something about this variety.—**H. E. Van Deman.**

**OTHERS, Too, Will Be Convinced.**—Washington, D. C., Feb. 2, '02: . . . Mr. Irvine, Editor Western Fruit Grower, said all that is necessary in vindication of my position. It is only a foolish bigot who will not change his mind on sufficient evidence; nothing convinced me there was a difference between the two apples and that they were really two, but seeing the trees in bearing. Before that I did not know absolutely, and only said I thought they were the same, from the samples I had seen.

If more people who are open to conviction, as every fair minded man should be, go down there and see the trees in Ark. as I did, they will be convinced too. . . . No one has any reason for getting "bitter" about this matter. ————— and ————— and ————— will finally HAVE TO see a difference between **B. B. D.** and Gano, and will be only manly to say so **WHEN THEY SEE IT**, and the reverse not to do it.—**H. E. Van Deman.**

**So Much Better.—E. A. Riehl, ex-Pres't III. Hort. Society, Alton, Ill., May 6, 1900:**

Apples you so kindly sent, to hand all right; was glad to receive them, as I could not believe Gano and B. B. D. identical,—judging from what I had seen. . . . Black B. D. were all sound and kept so until all were eaten. Whereas Gano nearly all more or less decayed. Cannot see how anyone can make the mistake of considering Black B. D. and Gano alike. Flesh of B. B. D. is yellowish, has a sweetish taste, reminding one of Gilpin (Romanite); Gano has white flesh and flavor like Ben Davis.—**E. A. Riehl.**

**Later, May 16, 1900:** Am always glad to receive your letters as they contain matters of interest, even tho I may not always agree with you in some matters. As I am not in the nursery business now, I can discuss these matters without prejudice. I only want the truth. You are quite right when you say the public cares nothing for trade controversies. Whether Black B. D. has any blood of Gilpin or not can never be proven. I only judge from the flavor, texture and shape of fruit, that such may be the case. As Gilpin is an old variety, it is quite possible that the seed that produced B. B. D. was pollinated by Gilpin. However that may be, B. B. D. is so much better than B. D. or Gano that I cannot understand how anyone who pretends to be a judge of fruit can think them alike.—**E. A. Riehl.**

**SAD MISTAKE.—Edwin H. Riehl, Hort. Ed., in Colman's Rural World:** Here we have two desirable apples which, resembling each other in appearance, have unfortunately been the cause of confusion thru the persistency of many growers, not having given them fair comparison under skillful test, in pronouncing them identical. I have heard parties say that while they were "fully convinced as to the merits of Black B. D., they could procure trees somewhat cheaper in the name of Gano." Such might truly be called a sad mistake for the reason that B. B. D. is in many ways superior to Gano. Not only has B. B. D. the advantage in quality and size and in being a better keeper, but is superior in wood growth and foliage. To the careful observer these two varieties are in many ways quite distinct, and it is high time that people are finding it out.

**Later, Apr. 30, '02:** Made very careful comparison of Gano and B. B. D. . . . Anyone can stand off at a distance and notice difference in the trees.

**All Enthusiastic.—Later, Rural World, Nov. 11, 1902:** A neighbor fruited Black B. D. this season in sufficient quantity that we can fairly judge it in comparison to Ben Davis that grew alongside. The B. B. D. are of better shape and were more heavily loaded with fruit, which would certainly have sold to far better advantage than the old B. D.—being so much more highly colored and of superior quality. The grower is quite enthusiastic over it, as indeed are others who have seen the bearing trees.—**E. H. Riehl.**

**Absolutely Distinct . . . BETTER than JONATHAN.—From Parker Earle, first Pres't American Hort. Society, Roswell, N. M., Nov. 2, 1902:** Apples from Mr. Femmons at hand. Black Ben Davis is certainly a beauty. So is Champion. Both are as solid as rocks. Am pleased with them. . . . I can see why people who do not look closely, should think the Black B. D. and Gano alike; but how any pomologist could pronounce them the same, I cannot see. . . . Gano is almost always striped more or less distinctly. Black B. D. has a pure solid color; and modeling of basin is distinctly unlike. . . . Delicious is a very notable and noble-looking apple. Different from all other apples I have seen. Far above common kinds in quality—better than Jonathan, for many tastes. It can be eaten by people with delicate stomachs and seem better and better the longer one eats. I am greatly obliged. Now, if I could see Stayman Winesap.—**Parker Earle.**

**FOUR Pomologists.—Later, Nov. 16, '02:** The more I consider Black B. Davis—Gano the more I am puzzled there should be any controversy at all. Why ordinary observers should call the two apples the same, because of similarity of form, size, color, I can see; but when the expert apple man examines them critically the difference becomes more pronounced than the resemblances,—and how my friends, Maj. Holsinger, Prof. Van Deman and Sec'y Goodman, than whom we have no abler pomologists, could even have thought them the same, surprises me. Two of these experts, however, have studied the matter seriously, and see the unlikeness very plainly. Our other friend will doubtless arrive at the same conclusion. . . .

Gano showed indications of stripes more or less distinct. The Black B. D. is nearly a solid red color. This seems to be an invariable characteristic and is quite sufficient by itself to show it to be an absolutely distinct variety from Gano. One of the most marked features of a variety by which unlikeness is determined, is the modeling of the basin about the calyx. How surely we recognize a Ben Davis, Winesap, Bellflower or Jonathan by this fine sculpturing, even when size, coloring, general shape and finish, all leave us in doubt. It seems to be the one best means of identification. In this respect, B. B. D. is quite distinct, less like Gano than like Jonathan.

Ben Davis and Gano are so notably alike in all respects that it is often difficult to distinguish them. Both are very valuable apples. Either of them may prove to be more important than Black B. D. That is quite another question, and is by no means fully settled.

But the matter of identity seems an easy one to determine. I am inclined to think that a few years will prove that this new and apparently very important and valuable variety, will be handicapped in the markets by having to carry this very widely-known name.—**Parker Earle.**

**Fruit Entirely Distinct, but Black B. D. resembles old Ben Davis in tree, fruit more like Jonathan, very dark red; attractive for market. Entirely hardy here, not injured by the severe cold in Feb. '99, and trees are free from blight.—M. J. Graham, before Ia. Hort. Soc., 1900.**

**Blossoms Different.—Later, May 12, '02:** Compared blossoms of Black B. D. and Gano and found them quite distinct.—**M. J. Graham, Dallas Co., Iowa.**

**A Winner.—**Visited State Fair at Yakima, Wash., and saw Black Ben D. Superb apple and bound to be a winner; handsome as Jonathan, but 3 or 4 times larger. Delicious is truly delicious.—**H. A. Stearns, Portland, Ore.**

**Beats Them All.—**Your new apples a credit to you and myself—am lucky to secure them. They are all you claim and more. . . . I don't know any better sorts. Black B. D. beats them all.—**Wm. F. Meier, Chelan Co., Wash.**

**King of All Apples.**—From **L. M. Winans**, Webster Co., Mo., Oct. 5, '01: My 1000-acre orchard of Stark Trees I found true to name—3 seedlings in the whole 80,000. Orchard now 5 years old; have sold the crop, on trees, for \$16,000 spot cash. Who can beat this record? It is surely thru Stark Bro's that I've been able to do this; you furnished best of trees, true to name. Champion (only 4 years planted) is by far the best variety of all; of good flavor. Strong, drouth-resisting, wiry grower, young bearer, and free setter of apples, as handsome and perfect as can possibly be grown. . . . Wish had put out 10,000 Champion instead of 1000.—**L. M. Winans.**

**Later, Sept. 21, 1902:** I find a decided difference in Gano and Black B. D. . . Black Ben Davis is absolutely King of All Apples. A more solid black red than Gano, trees much more thrif'v. Champion my first choice, so smooth and even in size; just all facers; handsome, a very late keeper.

**Champions are Fine.**—From **G. A. Atwood**, Editor Practical Fruit Grower, Springfield, Mo.: Drove over the Winans-Parker orchard, and was mightily pleased with all I saw. Trees young, but many loaded with apples. Mr. Winans busy picking fruit. . . praises Champion, and they are fine.

**1000 ACRES.**—Made special trip to the celebrated Winans-Parker orchard to take observations. . . We wished every P. F. G. reader could see those thousands of trees, as handsome a lot as one could wish to see. Apples were remarkable for size, color, freedom from defects. Mr. Winans accounts for quality and large quantity on 1-1/2, 5, 6 and 7 year trees from the fact they were properly grown at nursery? . . . have since received right kind of treatment. The Stark Bro's Nurseries, Louisiana, Mo., from whom Mr. W. obtained the trees, have good reason to feel proud of this orchard.

Mr. Winans has had large experience in orchard work. He stands up for Mo. Pippin, which some good orchard men say should not be planted any more. . . He calls down Ben Davis—does not think it averages with some other varieties. Has ordered a lot of Black Ben Davis, a variety which he greatly admires. As to Black B. D. and Gano being the same, he said former a more solid black red, trees more thrifty. . . Anyway, a most handsome apple; and he is willing to pay extra for more of the trees. Champion a great favorite. . . Wished he had planted 10,000 trees instead of 1000. Some of his 5-yr.-old trees have borne their third crop. Tree hardy, apples very handsome, smooth, even in size, late keepers—**Prac. Fruit Grower.**

**Most All of Us are Human . . . and It's Human to Err.**—Have fruited Black B. D.; larger and more productive here than Gano. Well pleased with Champion. Have sent beautiful samples to inquirers. I see some say B. B. D. and Gano are identical. They do resemble but B. B. D. far more valuable. . . Some said Gold and Juicy plums were the same.—**Jas. W. Waite.**

Horticultural history—and, for that matter, all history—abounds with similar mistakes. **Worden** grape was pronounced Concord—and instantly dealers were filling orders for Worden with Concord, just as now they are doing with Gano,—making confusion worse confounded. The **Senator** (All-Over Red) originated with "Grandfather" Jno. Holt, Wash. Co., Ark.; old tree was forked at ground, and forks 10 in. diameter in 1860; first grafted by Earl Holt. Oliver Red, also called Ohio Red, originated with John Oliver. In time All-Over Red and Oliver Red became confused, because of similarity of sound. Oliver Red (Ohio Red) is a shy bearer; not valued. Even the august Am. Pomological Soc., 10 years ago declared Paragon (of Tenn.) and Mam. Black Twig (of Ark.), identical; and so we changed all our Catalogues, Price Lists, Records, Packing Houses, Forms, etc., using name, "PARAGON (M. B. Twig)," and took up nursery stakes, etc., throwing the two sorts together—causing no end of loss and confusion. A year or two later we learned the truth, but meanwhile many thousands of trees had gone out.

**Far Better than Gano.**—From **Theo. Smith**, Whitman Co., Wash., Jan., '01: Black B. D. bore this season; the apple is far better than old Ben Davis or Gano, and entirely distinct from either. Darker color, better flavor, more solid and juicier. Your new fruits are proving of exceptional value and I thank you for benefits rec'd from your enterprise in introducing them.

**Kept Till Aug.**—**Later**, Oct., 1901: Bl ck B. D. kept until Aug. Much better apple than old Ben Davis or Gano. Prof. Van Deman was here last winter and left word that Gano and Black B. D. were the same. Had he come to my place I could have convinced him to the contrary.—**Theo. Smith.**

**In 20 Years . . . Will Come Wisdom.**—**Later**, Nov. 5, '02: Exhibited Black Ben Davis at our fair. Took several premiums. The judge is Prof. of Hort., Exp. St'n, Pullman, Wash. He pronounced B. B. Davis same as Gano. He's a young man yet, just come to the college; will probably know more about fruit 20 years hence. . . Senator is the one that suits my taste.

**Four Good Apples.**—**Later**, Feb. 1, 1903: Well pleased with Black B. D., Delicious, Senator, Champion; did much better than year before. Most young trees do not bear as good fruit the first season or two, so expect still nicer this year. Senator I like very much; will take the place of Spitzenburg and a much better tree. Champion improves, Delicious is truly delicious; Black Ben Davis (why not leave out "Davis" and say Black Ben?) colors much finer and flavor is far better than Gano or Ben Davis. Think I'll write Wes. Fruit Gr. and give my opinion also of Ben Davis. Was in Kan. when B. D. was first grown there; thought it too pumpkin like; have seen no reason to change my opinion. Not much beauty in that stripe. I want solid red or mottled red. . . . I send 2 bxs. Stayman Winesap, 1 bx. Banana, 1 bx. B. B. D. 1 bx. Senator—with 3 other kinds, all 3 of which I obtained of —, for "Bismarck."—**Theo. Smith.**

**PRIZE ORCHARD.**—**Sam'l T. Cole**, Clyde, Ark., to **Mo. Hort. Soc. Committee**, Sept. 24, '02: Don't want Gano on my place; falls badly, not uniform, uneven color; often has broad streaks—Black B. D. never. Few good specimens on trees, but many fail to color up—just a good Ben Davis. . . .

Black B. D. trees stood the 1901 drouth perfectly—old Ben D. wilted. B. B. D. best drouth-resister I ever saw—equal to Champion. Apples uniform red and solid, a little deeper colored flesh than Gano, juicier, better quality—and **a better keeper I never saw** . . . Hailed Col. Vincenheller, passing my orchard, and asked why he said B. B. D. and Gano the same. "Why, I'm a convert of 2 years' standing . . . planted 5 thousand Stark's Black Ben Davis last spring." What do I think of their comparative merits? Well, I'm seven miles from the old B. B. D. trees, have watched them and Gano for years—have 58-acre orchard of B. B. D., shall plant my whole farm.—**Sam'l T. Cole**.

**OUT-KEEPERS.**—**Later, S. T. Cole**, to **Prof. Van Deman**, Oct. 3, 1902: In midst of drouth 1901 the old Black B. D. trees at Bain's showed great drouth-resisting superiority over Ben D. alongside; foliage better, apples finest in the orchard. Two weeks later, the same. At end of drouth Black B. D. trees fine, apples solid and good. Ben D. withering foliage, apples shrunken spongy balls. . . . Gano gives some pretty specimens; too many lack color—just a good Ben Davis. Black B. D. deep red, firm, solid, has richer yellow colored flesh, more juice—a better apple. . . . Fall 1899 brought B. B. D. from Bain's, unwrapped, loose in buggy, 7 mi. over rocky roads, put in common cellar in box. Also stored home-picked Limbertwig, Shockley, Ben Davis, etc.—all rotted and gone May 15. B. B. D. beautiful large red apples, **sound and good July 24**—when were peeling early apples to evaporate. Out-keeps any apple I ever put in my cellar.—**Sam'l T. Cole**.

**LONGEST KEEPER.**—**Later**, Nov. 14, 1902: . . . Prof. Goodman ranks high as a pomologist, but at same time must say Gano and B. B. D. are separate and distinct varieties. Black B. D. is a heavier, much smoother, better colored apple, and takes on a better polish than Gano. Again, Gano gets soft before B. B. D. is ripe. B. B. D. is the best keeper I have ever grown. Three years ago I kept them in a common cellar until July 24, while other good keepers, including Limbertwig, Shockley, Ben Davis, Winesap, etc., all rotted and were entirely gone by May 15. . . . I do wish Prof. Goodman had come to my house. I could have shown him the two varieties together. I have found no one to say they are the same apple after lifting them, one in each hand; I can tell them apart in the dark.—**S. T. Cole**.

**Ark. Full of BOGUS B. B. D. Trees.**—**Later**, Dec. 9, 1902: Am glad the committee deferred report, rather than say B. B. D. and Gano are the same. Another year trust to be able to show a large bearing orchard that will satisfy anyone they are entirely different apples. . . .

I don't know about —'s nor —'s young B. B. D. trees; want 2200 from your original stock. Of course, you realize I'm growing B. B. D. **true to name**; you also know many nurserymen have had scions cut for them by persons who never had nor saw a true B. B. D. in their lives. **Our section is full of so-called B. B. D. apple trees.** There is scarcely a nurseryman but will sell you all you want of them. . . . Herein I send you agreements for all my B. B. D. scions. Will cut as per your instructions.—**Sam'l T. Cole**.

**Corrupt Trees . . . Cannot Bear Good Fruit.**—From **J. J. Griffith**, Washington Co., Ark., Oct. 25, 1902: Holsinger and Van Deman in Western Fruit Grower tell unpalatable truths for several parties here who are opposing you in Black B. D. If it were possible these same parties would pay big to have the facts kept from the public. For they have been cutting Gano scions and selling them as Black Ben Davis.

**The Oldest TRUE** Black Ben D. trees in existence, except the 9 old 20-yr. trees in Bain orchard, are those we sent out at 1-yr.-old, in 1896-7. Yet 10- to 20-yr. trees all over Wash. Co., have been dubbed "Black Ben Davis," the scions cut and sent broadcast. 'Cute persons, wise in their own conceit, even say the orchard from which we cut and grew Red Ben Davis, "must be Black B. D., or Stark Bro's wouldn't come way down here for the scions." So they go there, too, for "Black B. D." scions, with which to supply the brisk demand from far and near.

**COUNTERFEITERS and PIRATES** were ever mild-mannered, even when scuttling ship, etc. Buyers of Stark Trade-Mark Fruits know that a Trade-Mark has real value in law and may be assigned, sold, or transferred the same as any other real property. They know, too, that violators of State and U. S. laws, not to mention the agreement signed by all buyers of Stark Trade-Mark Fruits, "not to sell or dispose of any trees, scions, buds, etc.,"—they know well that such false-in-one-false-in-all dealers **are not the men** who are most likely to give their own customers conscientious and just treatment.

**Better in COLO.**—Harris, near Denver, Colo., Oct. 25, '02: Send you Black B. D. and Champion apples from Mr. Kountze. All trees look well, promise good crop next year. Mr. Kountze was out to see apples; highly pleased with Black B. D. and Champion. Gano does not compare with Black B. D. in Colo.; it would take a smart man to make anybody here believe they are the same. Have lots of faith in Delicious; they are fine. Absolutely no blight on Delicious or Champion. . . . Mont. O. is taking the day here; other cherries are good, but Mont. O. is better.—**Wes. Page**.

**Notes.**—In passing J. F. Bain's, Oct. 20, 1895, we noticed trees among his Ben Davis with fine dark red apples still hanging,—the main crop had been gathered. We were soon sampling what certainly seemed the most promising apple of entire Ben Davis type—far better than Gano. Finest, richest, deep dark red color, large size, of really good quality. Oct. 21, with 3 near-by orchardists, traced its history to the Rev. John Black farm, where original seedling came up in the '60's—long before dissemination of Gano. . . . Had it not been for Mr. Guthrie, the variety would have been lost. That, if we mistake not, would have been a loss indeed. All speak very highly of the apple. Mr. Bain is enthusiastic. . . . Its origin dating back to the '60's, long before introduction of Gano, makes it seem the more a pity it could not, have been sent out years ago. It would have been a great thing for Western orchardists.—As Burbank says, "We must multiply and distribute fast as possible". . . . At first we thought the name should be David; for, dipping into the future far as human eye can see, we saw a time when the young David should slay the great Goliath—old Ben Davis. We bought the original stock, paying over \$300, decided on Trade-Mark name, Black Ben Davis—both for the originator and because "Black" was truly descriptive, and with suffix Ben Davis would, in 3 words, carry more information than 3 pages might give—exhibited Black Ben Davis apples Nov., 1895, had colored plates drawn from same and lithographed, copyrighted July 13, 1896, and introduced, with following copyright description:

**BLACK BEN DAVIS (Trade-Mark).**—This great seedling of Ben Davis, we believe all orchardists would plant instead of Ben Davis and Gano, if they knew as much about it as we do. Great improvement on Ben Davis: More beautiful color, better quality, better keeper, surer bearer—four important points. Far and away ahead of Gano: Decidedly larger, fully as large as Ben Davis; Gano is smaller. Longer keeper and does not scald in cold storage; both Gano and Ben Davis do scald. A more solid, deeper red color; Gano often lacks color. Much better quality; Gano is no better than Ben D. In brief, Black B. D. is what Gano ought to be—but **is not**. We are convinced that Black B. D., Delicious and Champion are going to be 3 of the most popular market apples grown. Each one has been well tested. Black B. D. originated with Rev. John Black in N.W. Ark. in the '60's. Later, 9 trees were grafted and set in orchard where they have regularly excelled Ben Davis—**bearing** (as this year, 1896) **when Ben Davis failed**.

For 70 years parts of N. W. Ark. have been an actual **vast Experiment Station**, people planting seeds of their best apples; hence so many new valuable sorts—many of them good, some better than good, a few **superlative**. But, in our search for apples superior to any now in cultivation, we paid no attention to any sort that lacked **size, color, quality, vigor, productiveness**. We then traced origin—learning many valuable facts.

Briefly, among the new apples we offer are several which we believe **surpass anything now in cultivation**. As compared with each other, and with the **astonishingly fine** new Iowa apple, Delicious, we value them in the following order: Delicious, Black Ben Davis, Champion—and even the latter **pays better** than Mo. Pippin, Ben Davis, Willow Twig, etc.

The above was the first name and the first word of description ever printed of the Black Ben Davis apple. Indeed, before we saw and called attention to its value in 1895, it was absolutely unknown, save by neighbors. Yet it had been hauled 100's of miles to market as early as 1874—full 21 years before our first sight of this great export apple of the future. Had borne fine crops in the Bain orchard for many years. And other nurserymen had even been begged to graft,—all this, too, with a live Professor of Horticulture at the county-seat town! Prof. Stinson, however, did hurry out his "Preliminary Report" in Jan., 1898!

"The object in publishing this preliminary report in advance is to bring to attention . . . most important new varieties. . . . Another reason is that enterprising nurserymen in other states have secured stock, etc."

There really was no need for such haste on his part, for Stark Bro's during **more than two years**, had already been rather vigorously "bringing to attention" Black Ben D. and other "important new varieties." But what makes the Professor's unseemly rush to publish all the more regrettable, is that he palpably lacked time to consult his Warder or Downing. Otherwise, he could hardly have made the grievous mistake of trying to fasten the name of an old Indiana apple on our new Black Ben Davis,—to say nothing of those other well-known Pomological rules as to Priority of Publication, Introducer's Right to Name, etc.

**CHAMPION** (Trade-Mark).—Of our new apples, only this and Senator were ever exhibited before 1895,—when they were shown at the STARK FRUIT FAIR. Both have aroused interest ever since shown at World's Fair, where they took the lead among 60 worthy new sorts. In the locality where they have been grown for years they **lead Ben Davis**, one planter saying, "Wish ALL my trees were Champion and Senator," another, "Wish all my M. B. Twigs were Champion." Excels Willow Twig in value,—in color, beauty, smoothness, **keeping**. For **quick and sure profit**, Champion equals, perhaps surpasses, Mo. Pippin—yet it is long-lived, for the old 40-yr. tree, with no care, yearly bears perfect fruit. Uniform shape, medium to large, yellow, covered with bright red—in finely penciled streaks, broader stripes and, on the sunny side, often deep solid red. Flesh yellow, juicy, good, **does not become dry**, even in late spring. Keeps well and long. Colors earlier than Ben Davis, but will **hang much longer**, tree bears younger and fuller, is strong jointed, shouldered, never splits; **grand foliage**.

**III. Fruit EXPERIMENT Stations.**—E. A. Riehl in **III. Hort. Report**, 1902: Champion fruited for third time; good and young bearer, large size, red; would plant in preference to Ben Davis.

**DELICIOUS** (Trade-Mark).—“Hangs as well as Ben Davis, keeps as well, is as good a shipper (instead of decaying, bruises dry up like Ben Davis), as large, of finer color, as strong a grower, hardier, **bears every year**. Not a man tastes it but says it is the best apple he ever saw. Once introduced there will be but **little call for Jonathan**. If it is not a better apple than any in your large list it will cost you nothing. Am nearly 70, have raised apples all my life and would not willingly overestimate Delicious for 40 such apples.”

“Delicious was 6 years old when it fruited. Was so fine a fruit I at once upturned sod around tree, and it soon began making strong, thrifty growths. Now 15 years old and is 13 inches diameter at ground. Makes strong, vigorous growth, similar to Winesap, except branches are stronger, and needs little or no pruning. Both tree and fruit are perfect models. Tree has heavy, dark green foliage, strong, finely moulded limbs, adapted to bearing great weights of fruit, and a body upright and giant like, with smooth dark bark. Does not sprout or sucker. Does not sun-blight. Has never shown any tenderness. During last 8 years, drouth and cold have killed three-fifths of my orchard, but Delicious stood all right. **Bears annually large quantities** of luscious fruit. Both beautiful and delicious, praised by all who have tasted it; has a **peculiar quality that cannot be described**, and a delightful, fragrant aroma. Brilliant, dark red, often mingled with gold near blossom end. Splendid winter keeper, equal to Ben Davis. Delicious is greatly exciting everyone who tastes it. All declare it to be the **best apple in the world**, that the half has never been told.”

So wrote the venerable originator, Jesse Hiatt, of near Des Moines, Ia., when first sending us Delicious. We found them extraordinarily fine—quality surpassing even Jonathan or Grimes Golden. The next year he sent us two barrels—**no pear more delicious**.

**Will DELIGHT Unborn Millions.**—Jan. 13, '03: Black B. D. and Delicious sent me are exceedingly satisfactory—both better than I expected. . .

Black Bens are almost the handsomest apples I ever saw, and Delicious are—what we have not eaten—keeping as perfectly as Black B. D. They seem to be two very grand apples. Delicious has the most delicate flesh texture I have ever seen in an apple, and it can be eaten with delight by thousands of people who cannot eat common apples—to whom Winesap, for instance, is a prolonged misery. The most sensitive stomachs will accept Delicious with joy and thanksgiving.—**Parker Earle**.

**DELICIOUS** apple is well named. I have this year, for the first time, had opportunity to examine specimens of it. Some were grown in Cal., others on the original tree in Iowa. It is of good size, conical, red striped and **most excellent in quality**.—**Prof. Van Deman**, in Green's Fr't Grower, Feb. '03.

**This Valuable Apple.**—From **G. B. Brackett, U. S. Pomologist**, Wash., D. C., Nov. 17, 1902: . . . By the way, I've recently rec'd specimens of the Delicious. . . Why have you never sent us specimens of this valuable apple for examination? Am having drawings and paintings made.

**\$10 PRIZE . . . flavor far ahead.**—From **J. S. McClelland**, Larimer Co., Colo., Jan. 31, '03: At annual meeting Colo. State Hort. Society, held in Denver this week, a premium of \$10 was offered for the best flavored winter apple. Delicious, exhibited by me, easily took 1st Prize, and its flavor was declared by everyone to be **far ahead of all apples**. Tree is a good bearer here and is hardy,—certainly one of our most promising fruits.

**Finest in the Orchard.**—From **L. Chapman**, Boulder Co., Colo., Oct., 1901: Went to the Kountze Orchard to see Black B. D.—the finest in the orchard a handsome apple—trees full; shall plant B. B. D. Ate a Delicious—the not ripe, flavor was fine. Kountze Orchard (set 1897) . . . is the handsomest I ever saw. Will be a great advertisement for Stark Trees. When I get my orchard there will be another—for all will be Stark Trees.